

Abstract

A method for motion estimation combining a one-pixel greedy search algorithm (OPGS) and a hierarchical search block matching algorithm (HSBMA), and an apparatus therefor are provided. The method includes the steps of (a) inputting a frame in units of macro blocks and a search area and estimating candidate motion vectors for a macro block
5 desired to be estimated; and if an error of the candidate motion vectors estimated in step (a) is in a threshold range, estimating motion in a search area which is smaller by a predetermined amount than the previous search area, centered on the estimated location, and otherwise, estimating motion in the whole search area.